Water Saving in the Garden

Some basic facts about cisterns and rainbarrels

Catching and saving rainwater is nothing new. Generations ago, families saved water in barrels, ponds or cisterns for use in watering plants, washing clothes and even drinking. Such water-saving is still common in many parts of the world. The Pacific Northwest's reputation for rainy winters makes it hard to remember that summers are often dry. But between the months of May and September Seattle receives about seven inches of rain, only 20% of our annual precipitation.

Using native and other drought-tolerant plants can reduce your garden's water consumption. Limiting the amount of space devoted to thirsty lawn grass can also reduce water demand. But saving rainwater is also a great way to reduce your need for municipal water supplies. And with rainfall below normal this winter, your saved rainwater may help keep water in streams and rivers for salmon next summer.

Several years ago, King County's demonstration garden at the Northwest Flower & Garden Show, featured two large cisterns that caught and stored rainwater landing on the roof of a house. Rather than channeling the water through downspouts onto lawns or into storm drains, the catchment system poured water into concrete storage tanks, called cisterns.

Cisterns, often made of concrete, store large amounts of water, but can be expensive and time-consuming to construct. A simpler alternative is the old-fashioned rain barrel. There are manufactured rain barrels on the market, or you can construct your own with large plastic drums or even garbage cans. One of the simplest systems is made up of several barrels connected with pipe; a spigot is attached low on each barrel and an overflow drain on the last barrel in line directs any extra water to a safe location.

Some simple planning will prevent the most common problems with rain-saving.

- Use a tight-fitting, light-blocking lid to keep children and animals out of the water and stop the development of algae.
- Add a screen to keep leaves and other debris out of the water.
- Use an overflow device to direct excess water away from your home's foundation when the tank is full.
- Monitor the cistern to ensure intakes and overflows aren't blocked.
- **Note:** Water stored in this system is not potable unless treated, and should not be used as drinking water.

If this all seems like a lot of work for a little water, remember that one inch of rain falling on 1,000 square feet of roof adds up to 623 gallons. That's enough to keep a lot of petunias happy!

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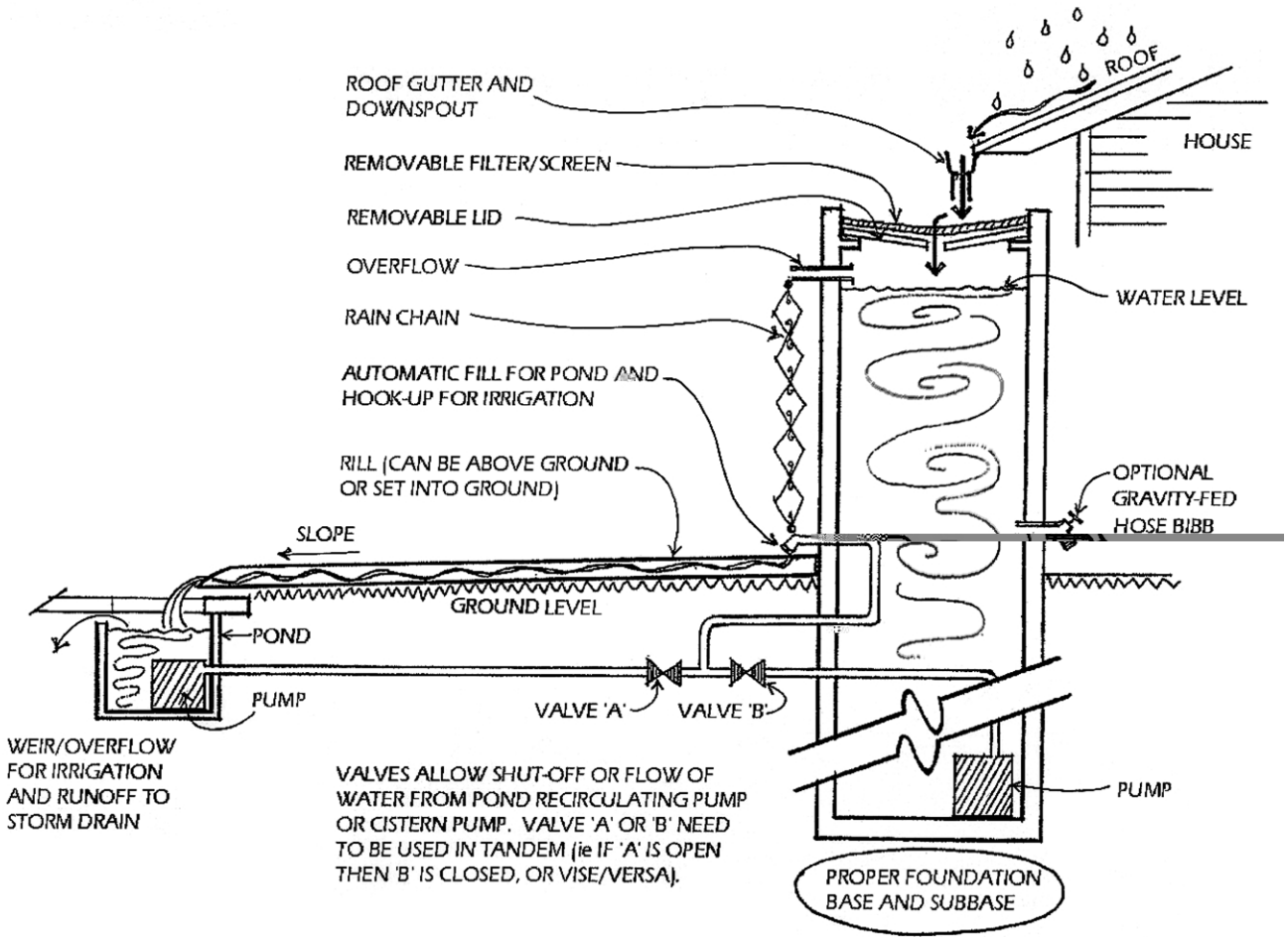

For more information

"Rainwater Harvesting" in Landscape Architecture magazine, April 2000. By University of Washington associate professor Daniel Winterbottom. This is available at *http://dnr.metrokc.gov/wlr/PI/pdf/Rainwater-Harvesting.pdf* with permission of the publisher and author.

Conserving Water: Rainbarrels, Cisterns and Gray Water, a fact sheet from WSU Cooperative Extension, Clallum County. Available on the Web at *http://clallam.wsu.edu/waterquality/rainbarr.html*

Rainwater Collection for the Mechanically Challenged by Suzy Banks. Tank Town Publishing, 1997.

The American Rainwater Catchment Systems Association
P.O. Box 685283, Austin, TX 78768-5283 or *http://www.arcsa-usa.org/index.htm*

There are many companies that sell products for rainwater catchment and storage. While King County does not recommend or endorse these or any other companies, some are listed here for your information.

Jade Mountain
(800) 442-1972
www.jademountain.com

Gardener's Supply Company
(888) 833-1412
www.gardeners.com

Oasis Design
(805) 967-9956
www.oasisdesign.net

The Green Culture
(800) 233-8438
http://www.watersavers.com/